## FROWEIN GMBH & CO. KG

# **Gerinol-EC**

#### Use

Gerinol-EC is a new type of insecticide with an active ingredient that hasn't yet been used in the section of hygiene and health protection. Developed for professional use in sensitive rooms (living- and bedrooms, hotel rooms, etc.). For control of bed bugs – but also for garden ants (Lasius niger), houseflies, red bird mites, body lice and fleas.

#### Type

Emulsifiable concentrate (EC) - concentrate to be diluted with water.

#### **Active ingredient**

Geraniol (351 g/l).

Contains calciumdodecylbenzenesulphonate, isobutanol, NGEM

Geraniol is an acyclic monoterpene allylal-cohol. As a flowery scent, it is part in many perfumes. Geraniol is an intermediate in the production of geranyl esters, citronellol and citral. It is part in most essential oils and occurs in coriander, laurel and nutmeg. The primary part is in palmarosa oil (*Cymbopogon martinii*, 70 – 85 %), geranium oil and rose oil.

#### Mode of action

Bed bugs react differently to Geraniol compared to conventional contact-insecticides (e. g. pyrethrum). Geraniol is almost only effective as a contact insecticide. To achieve an optimal effect, the insect has to be completely coated with a Geraniol film. There is no effect to the nervous system (sodiumpotassium pump, block of the synapse), because the effect depends on the wetting of the insect. After the wetting, the water displacement out of the insect is very important. Geraniol is effective either through the respiratory system and/or after dissolving of the exoskeleton. According to that the cause of death is anoxia by aspiration, dehydration and/or effect of solvents to chitin and chitobiase or the wax layer that protects the body of the insect.

#### **Special features**

- Can also be applied in very sensitive sectors.
- New type of active ingredient or new group of active substances for use in hygiene sectors: also suitable for use if resistance to other insecticides has already set in or is assumed.

#### Dosage

20 – 50 ml/m² depending on kind of surface. The preparation should not run off.

#### **Application**

Gerinol-EC is sprayed as 4 % water dilution (200 ml concentrate per 5 l preparation).

Gerinol-EC is sprayed into hiding places and hollow spaces, where bed bugs are detected and suspected. The bed bug has to come into contact with the insecticide; therefore it is necessary that the hiding places and hollow spaces are sprayed out well. It can also be sprayed on runways and surfaces. Effective against bed bugs by contact with the spray or the spray deposit within 24 hours. No residual effect.

Expose hiding places of pests if possible. Spray all infested, traversed and suspected places as well as their immediate surroundings. Suitable application equipment is the "808"-SprayBOSS or similar pressure sprayers. Spraying pressure should not exceed 2 bar. Use the ready-to-use preparation within 24 hours. Same method for the other above mentioned pests.



### Monitoring

It is appropriate to find out kind and extent of infestation before each pest control. Suitable equipment in case of bed bugs is the bed bug monitor "808". Please enquire for other monitoring-systems.

#### Caution

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Keep out of reach of children. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of water. If skin irritation or rah occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISONCENTER/doctor/physician. Vapours may form explosive mixture with air.

Store package tightly sealed in cool places. Keep away from waters.

#### Disposal

Wastes resulting from the use of this product are to be disposed to an authorised waste collection point. Completely empty packages are to be offered for recycling.

#### **Packaging**

Aluminium bottle, cont. 1 l.





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